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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,318	02/20/2004	Isao Kanno	FS.17208US1C	6876

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Knobbe Martens Olson & Bear LLP
2040 Main Street
Fourteenth Floor
Irvine, CA 92614

EXAMINER

BASINGER, SHERMAN D

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/783,318

Applicant(s)

KANNO, ISAO

Examiner

Sherman D. Basinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-44 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 19-44 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/113,922.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/20/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

1. The preliminary amendment has been received.
2. In the specification paragraph [0001] should be updated to reflect application number 10/113922 being patent 6,712,651.
3. Figures 5, 9, 11, 12 and 13 of the drawings should be amended to include the changes made to the drawings filed in the parent application by the proposed drawing correction filed June 30, 2003. Note that the specification of the instant application has been amended in accordance with the proposed drawing correction filed in the parent application June 30, 2003.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" (37 CFR 1.121(d)) and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing

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sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 25, 36, 37 and 44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification as originally filed fails to provide support for: the controller being configured to respond to a fault detection in said lubrication system when said watercraft is at planing speed so as to gradually reduce the engine speed of said watercraft to reduce said watercraft's speed to below planing speed.

The specification as originally filed also fails to provide support for the watercraft being designed to accommodate no more than 4 passengers.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 38-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 38 is incomplete because it depends from itself. Claims 39-44 depend from claim 38.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 19-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henmi in view of Hapka et al and Tobinaga et al.

Henmi discloses a jet pump powered small personal watercraft designed to accommodate no more than 4 passengers comprising a hull with a rear portion that defines a planing area (see figures 1-3), an engine 22 disposed within the hull, a lubrication system configured to circulate lubricant through the engine (see column 5, 1st full paragraph), a throttle valve 102 and an engine load input device comprising a throttle lever 103.

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Henmi does not disclose a lubricant pressure sensor configured to detect a pressure within the lubrication system, an engine speed sensor configured to detect a speed of the engine, a controller configured to gradually decrease engine speed if the lubricant pressure is below a predetermined pressure, and the controller being configured to determine the engine load based on a position of a throttle valve.

Hapka et al discloses a lubrication pressure sensor 13 used in a system to reduce engine speed gradually by cutting off fuel to fuel injectors 20 so as to disable one or more fuel injectors and to also reduce the fuel injection to at least one of the combustion chambers when oil pressure falls below a pressure limit, and a controller configured to gradually decrease engine speed if the lubricant pressure is below a predetermined pressure.

Tobinaga et al discloses an engine speed sensor 32, a throttle valve opening sensor 34 to detect the position of the throttle valve and a controller configured to determine the engine load based on a position of the throttle valve through the throttle valve opening sensor 34 and to reduce engine speed when a detector of lubricant level detects a low level (columns 19 and 20).

In view of what is taught by Hapka et al and Tobinaga et al, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide to Henmi a lubricant pressure sensor configured

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to detect a pressure within the lubrication system, an engine speed sensor configured to detect a speed of the engine, and a controller configured to gradually decrease engine speed if the lubricant pressure is below a predetermined pressure, the controller being configured to determine the engine load based on a position of a throttle valve.

Motivation to do so is to protect the engine of Henmi from low lubricant pressure and to gradually reduce engine speed to protect a rider of the Henmi watercraft.

In Henmi the engine load input device 103 is in direct communication with the throttle valve 102.

By disabling the fuel injectors as taught by Hapka et al, the controller is configured to gradually reduce combustion in the engine so as to gradually reduce the speed of the engine.

Hapka et al discloses the controller triggering an alarm 18a when the pressure of the lubricant changes by more than the predetermined magnitude of pressure. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide such an alarm to Henmi along with the controller. Motivation to do so is to provide a visual warning that the lubricant pressure is insufficient.

Neither Henmi, Hapka et al nor Tobinaga et al disclose the controller being

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configured to respond to a fault detection in said lubrication system when said watercraft is at planing speed so as to gradually reduce the engine speed of said watercraft to reduce said watercraft's speed to below planing speed.

However, to configure the controller provided to Henmi in view of the controllers of Hapka et al and Tobinaga et al as such would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Motivation to do so is to have the engine speed only reduced for a lubricant pressure malfunction if the engine speed is sufficient to produce planing of the watercraft of Henmi. If the watercraft isn't planing, the engine speed is less likely to suffer damage to low oil pressure.

With regard to the controller being configured to continue to operate the engine at a reduced engine speed until the engine load input device is moved to a position corresponding to an engine load that is below a predetermined engine load, see column 19, lines 55-65 of Tobinaga et al. Thus, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to have the controller provided to Henmi in view of Hapka et al and Tobinaga et al be configured to reduce engine speed until the engine load input device is moved to a position corresponding to an engine load that is below a predetermined engine load. Motivation to do so is to protect the engine by keeping the speed of the engine low when a user still attempts to operate the engine in a high speed although lubricant pressure is insufficient.

Henmi discloses the jet pump driven by the engine and the steering nozzle.


Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patent 6,712,651 is the parent patent. Palmer is cited to show a device for slowing engine speed in event of oil pressure failure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 703-308-1139. The examiner can normally be reached on M-F (6:00-2:30 ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sherman D. Basinger
Primary Examiner
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sdb

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